

AS100D Acoustic Soloist Combo

From Jim Marshall

I would like to thank you personally for selecting the AS100D, Acoustic Soloist combo.

The Marshall name has been associated with many fine products over the years and our commitment to quality remains as constant today as it did at the birth of Marshall Amplification, back in 1962.

In the case of the Acoustic Soloist amplifier range, much time and research has gone into making their sound as natural as possible. The design team, being guitarists, fully understand the needs of the player and have brought their expertise fully to bear on these products.

The AS100D also marks a significant milestone in Marshall amplifier history as it is the first model to carry on board digital effects, to give vou the highest possible sound quality. You can also rest assured that the Marshall hallmarks of design and engineering excellence come as standard ensuring that this amplifier will stand the test of time, even after constant use.

I strongly suggest that you read this handbook carefully before using your new amplifier, then keep it on hand for future reference.

I am certain that you will derive great enjoyment from your Marshall Acoustic Soloist combo and wish you every success with it.

Yours Sincerely,



WARNING! - Important safety instructions

WARNING: This apparatus must be earthed!

- A PLEASE read this instruction manual carefully before switching on.
- **B** ALWAYS use the supplied mains lead, if a replacement is required please contact your authorised Marshall Dealer.
- C NEVER attempt to by-pass the fuses or fit ones of the incorrect value.
- **D DO NOT** attempt to remove the amplifier chassis, there are no user serviceable parts.
- E Refer all servicing to qualified service personnel including replacement of fuses and valves. Servicing is required when the apparatus has been damaged in any way, such as the power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally or has been dropped.
- F NEVER use an amplifier in damp or wet conditions.

ENGLISH

- G ALWAYS unplug this apparatus during lightning storms or when unused for long periods of time.
- **H** Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles and at the point where they exit from the apparatus.
- I DO NOT switch the amplifier on without the loudspeaker connected.

Note: This equipment has been tested and found to comply with the requirements of the EMC directive (Environments E1, E2 and E3) and the Low Voltage directive in the E.U.

EUROPE ONLY - Note: The Peak Inrush current for the AS100D is 21 amps.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- ◆ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- ◆ Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Any changes or modifications not expressly approved by the party responsible for compliance may void the users authority to operate the equipment.

Note: It is recomended that all audio cables used to connect to the AS100D are of a high quality screen type. These should not exceed 10 metres in length.

WARNING: Do not obstruct ventilation grille and always ensure free movement of air around the amplifier!

USA ONLY - DO NOT defeat the purpose of the polarised or grounding type plug. A polarised plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. When the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Follow all instructions and heed all warnings

KEEP THESE INSTRUCTIONS!

Introduction

The AS100D is a comprehensively featured 100 watt combo amplifier, specially designed for use with a variety of acoustic instruments. Between its four channels, this combo has the flexibility to handle instruments with piezo transducers or magnetic pick-ups, plus microphones for both vocal and instrument reproduction. Its 2 x 50 Watt stereo configuration gives you enough power to perform on stage with superb clarity, while the provision of a balanced line out allows direct connection to an external PA system for larger concert venues.

The built-in digital effects for Reverb, Delay and Chorus add an entirely new dimension to the range of sounds available. If you want to add further effects, then there is a parallel effects loop with level control.

One of the most difficult aspects of amplifying acoustic instruments is feedback. To help you eliminate this, the AS100D features several 'anti-feedback' controls, including a Phase switch for each channel and frequency controllable Notch Filters with selectable extra depth for channels 1 and 2. It also features a fourth channel suitable for CD/MD, tape player or a drum machine if needed.

For clear and detailed performance, the AS100D is loaded with two 8" speakers and two high fidelity polymer dome tweeters. There is also an internal limiter which allows you to push the maximum level from the stereo 50 Watt output stage, whilst remaining distortion free.

Compact and portable, the AS100D offers great flexibility and is the ideal amplifier for the acoustic player who wants the highest quality performance and natural tonal reproduction.

AS100D Front Panel Features

The AS100D provides two separate preamps to capture the best sound out of your acoustic instrument. Having two channels dedicated to acoustic instruments allows you to mix two types of commonly used pick up (Piezo, magnetic or microphone), between either two mono jacks or a stereo jack.

Channel 1 - Acoustic Instrument

1. Input Jack

This input will accept a normal mono jack lead from a piezo transducer or magnetic pick-up.

Plug the lead from your guitar in here to connect you to channel 1.

This is also a stereo input designed speciality for those acoustic instruments which feature a variety of pickups (e.g. magnetic and transducer) fed through a single stereo cable. In this mode the signal from the ring of the stereo jack is automatically routed through to channel 2 by selecting the Link Ch 1 switch (item 17). This allows separate preamp control for the two different pick ups.

2. Phase Switch

Reverses the phase of the signal to cut out unwanted resonances caused by the instrument and speakers being in phase.

Ensure that you test this in the position where you will actually perform.

3. Gain Switch

Increases the amount of gain to the input and is extremely useful for boosting the signal of pickups with very low output levels.

4. Volume Control

Adjusts the volume level of channel 1.

5. Bass Control

Adjusts the amount of bottom end or bass in your sound. Too much bass can cause unwanted feed back, therefore care should be taken when setting this control. The best position to start is 12 o'clock, then adjust from there as desired.

6. Parametric Mid Control

Cuts or boosts the mid-range of your sound. This control works in conjunction with item 7 (mid frequency control) to give the maximum possible control over the all important mid -range of your instrument's tonal spectrum.

7. Mid Frequency Control

Adjusts the frequency of the mid range control (item 6).

8. Treble Control

Adjusts the high end or treble frequencies in your tone. Again, care should be taken when setting this control as too much treble will cause high pitched feedback. The starting point of the 12 o'clock position is best.

AS100D Front Panel Features

Channel 2 - Acoustic Instrument and Microphone

9. Instrument Input

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Mono jack input. Plug the lead from your guitar in here to connect to channel 2 only.

10. Microphone Input

XLR type socket to connect a microphone to channel 2.

11. Link Channel 1 Switch

Switch to link channel 2 (when an instrument with a single stereo jack is connected) to the stereo Input of channel 1 (see item 1). Channel 2 level and EQ settings will affect the signal connected to the ring of the stereo input jack. (item 1). Refer to block diagram.

12. Contour Switch

Changes the contour of the channel EQ by cutting the Mid by a predetermined amount.

13. Phantom Switch

If you require Phantom power for your condenser microphone, pressing this switch provides +15V.

14. Phase Switch

Reverses the phase of the signal to cut out unwanted resonances caused by the instrument and speakers being in phase. This can considerably reduce the amount of low frequency acoustic feedback.

Ensure that you test this in the position where you will actually perform.

15. Volume Control

Adjusts the volume level of channel 2.

16. Bass Control

Adjusts the amount of bottom end or bass in your sound. Too much bass can cause unwanted feed back, therefore care should be taken when setting this control. The best position to start is 12 o'clock, then adjust from there as desired.

17.Treble Control

Adjusts the high end or treble frequencies in your tone. Again, care should be taken when setting this control as too much treble will cause high pitched feedback. The starting point of the 12 o'clock position is best.then adjust from there to suit your own preference.

Channel 1 and Channel 2 mix Anti Feedback Section.

18 'On' Switch

Activates the Anti Feedback filters (items 21 & 22) for both acoustic instrument channels.

19. Depth Switch

Increases the depth for both notch filter controls 20 & 21.

20. Rotary Feedback Filter (Sweep 1) Sweeps the band of frequencies most likely to cause body resonance (the main offending

cause body resonance (the main offending feedback frequencies) from 50Hz - 250Hz and reduce it when selected.

21. Rotary Feedback Filter (Sweep 2)

Provides a second sweep of a broader band of frequencies (60Hz - 650Hz) to help remove the second offending frequency.

TIP: In order to select and eliminate the offending frequencies, select the point where the feedback just appears and move the frequency control until it disappears. Next, increase the gain level until the feedback reappears and adjust the frequency again, then back off the level slightly.

Channel 1 and Channel 2 mix Effects Switches

22. Internal Effects Switch

Activates the internal stereo digital effects section for the acoustic instrument channels.

23. External Effects Switch

Activates the external effects loop for the acoustic instrument channels.

Channel 3 - Microphone

24. Microphone Input

XLR type socket to take the input from an external microphone for either vocal or instrument reproduction.

25. Phase Switch

Reverses the phase of the signal to cut out unwanted resonances caused by the instrument and speakers being in phase.

26. Phantom Switch

If you require Phantom power for your condenser microphone, pressing this switch provides +15V.

AS100D Front Panel Features

27. Volume Control

Adjusts the volume level of channel 3.

28. Bass Control

Adjusts the amount of bottom end or bass in your sound. Too much bass can cause unwanted feed back, therefore care should be taken when setting this control. The best position to start is 12 o'clock, then adjust from there as desired.

29. Treble Control

Adjusts the high end or treble frequencies in your tone. Again, care should be taken when setting this control as too much treble will cause high pitched feedback. The starting point of the 12 o'clock position is best, then adjust from there to suit your own preference.

30. Internal Effects Mix Control

Selects the amount of effect from the built in digital effects for channel 3 only.

31. External Effects Mix Control

Selects the amount of effect on channel 3 from any external effects processor connected through the FX Loop.

Channel 4 - Auxiliary

32. Phono Inputs

Left and right phono sockets for connection to CD/MD/Tape player, Drum Machine or other backing equipment. This channel works in stereo.

33. Volume Control

Controls the volume level of the auxiliary channel.

Stereo Digital Effects

34. Program Select Control

Rotary control to select one of the 16 digital effects programs.

35. Parameter Adjust Control

Adjusts the main parameter of the effect selected by Program Select Control (item 34). The main parameter is <u>decay time</u> for all Reverb and Delay programs. For Chorus, Flange and Modulation programs, it is the <u>Speed.</u>

36. Effects Level Control

Controls the amount of the digital effects signal in the mix

Master Volume

37. Master Volume Control

Controls the overall volume level of the AS100D.

AS100D Rear Panel Features

1. Mains Input

Plug the mains power cord provided in here

2. Footswitch Jack Socket

For connection to the supplied remote footswitch which provides switching of both internal and external effects.

3. Effects Send

Sends the signal from the AS100D to the input of an external effects processor.

4. Effects Level Control

Rotary control to adjust the external effects return level.

5. Stereo Effects Return

Left (mono) and Right returns to accept the output from an external effects processor. If the processor is mono (such as a floor pedal), connect to the left (mono) return jack.

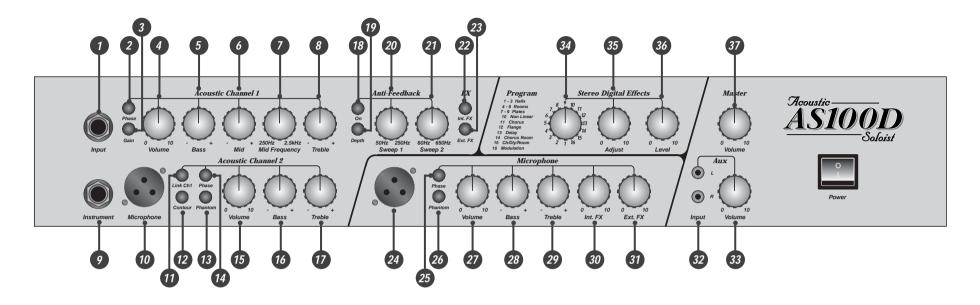
6. D.I. Outputs

Left and right direct outputs, fully balanced for connection to external PA mixing desk.

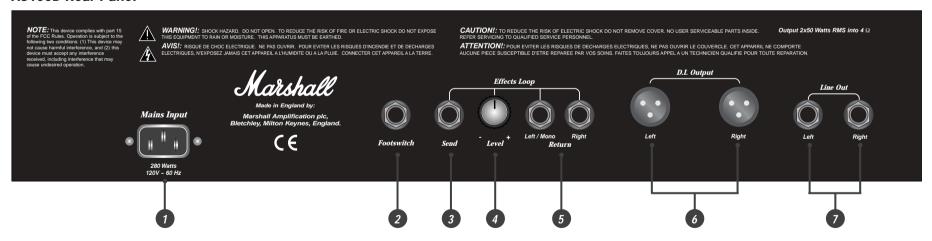
7. Line Out

Unbalanced Left and right direct outputs for connection to recording or other outboard equipment.

AS100D Front Panel



AS100D Rear Panel



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